

REMARKS

The Examiner's comments in the Office Action dated July 21, 2005, have been carefully considered by Applicants. In view of such comments, Applicants have amended the claims as set forth herein. In particular, independent claims 1 and 12 have been amended to better highlight the patentable differences of Applicants' proposed invention as compared to the prior art cited and interpreted by the Examiner in the Office Action. In making such amendments, Applicants maintain that no new matter has been introduced into the present Application. Furthermore, no claims have been altogether newly canceled, and no entirely new claims have been added. Thus, claims 1-4 and 6-20 remain pending in Applicants' present Application. It is Applicants' good faith belief that the pending claims, as presented herein, are both novel and non-obvious. Therefore, Applicants respectfully maintain that the pending claims now place the present Application in condition for allowance and notice thereof is respectfully requested.

35 U.S.C. § 103(a)

In the Office Action, independent claims 1 and 12 and also dependent claims 2-4, 6-11, and 13-20 stand rejected under 35 U.S.C. § 103(a) as being obvious and therefore unpatentable over United States Patent Number 5,999,604, issued to Walter on December 7, 1999 (hereinafter "Walter"), in view of United States Patent Number 6,072,493, issued to Driskell *et al.* on June 6, 2000 ("Driskell"), and in further view of United States Patent Number 5,325,290, issued to Cauffman *et al.* on June 28, 1994 ("Cauffman"). Applicants respectfully traverse each of these 35 U.S.C. § 103 rejections set forth in the Office Action in view of the claims as amended, for Applicants' invention as presently claimed is deemed not merely an obvious improvement over the prior art cited by the Examiner.

With general regard to the Examiner's rejections under 35 U.S.C. § 103, Applicants respectfully maintain that rejection for obviousness must be based upon

objective evidence of record and requires that particular findings be made as to why a skilled artisan with no knowledge of the claimed invention would have selected the specific components for combination in the manner claimed. Thus, in order for any prior art references themselves to be validly combined for use in a prior art obviousness rejection under 35 U.S.C. § 103(a), the references themselves, or some other piece of prior art, must suggest that they be combined. In re Sernaker, 217 U.S.P.Q. 1, 6 (C.A.F.C. 1983). That is, the suggestion to combine the references must not come from Applicants' proposed invention itself. Orthopedic Equipment Co. v. United States, 217 U.S.P.Q. 193, 199 (C.A.F.C. 1983). In sum, in order to establish a *prima facie* case of obviousness, it is necessary to present evidence, in the form of some teaching, suggestion, incentive, or inference in the applied prior art, or in the form of generally available knowledge, that one having ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. Ex parte Levengood, 28 U.S.P.Q.(2d) 1300 (P.T.O.B.A.&I. 1993).

With regard to the obviousness rejection of independent claim 1, Applicants maintain that the combination of Walter, Driskell, and Cauffman does not render obvious Applicants' claimed invention. In particular, with regard to Applicants' independent claim 1 as amended, Applicants maintain that Walter, Driskell, and Cauffman, either alone individually or in combination with each other, neither teach nor suggest:

[a] method of processing a plurality of call detail records (CDRs) each indicative of a call transaction on a telecommunications network, said method comprising the steps of:

preliminarily processing said CDRs according to which telecommunications service providers supported the call transactions indicated in said CDRs;

in response to a user request from a remote user terminal, receiving said plurality of CDRs at a first controller, each of said CDRs having a data structure including a plurality of fields containing at least one character;

selecting a first sorting field from said plurality of fields and grouping said plurality of CDRs as a function of data within said first sorting field, said first sorting field being user selected as a carrier identification field;

thereafter analyzing a user-selected second sorting field within each of said CDRs within a group of CDRs sorted by said first sorting field;

generating a customized carrier-specific report for each of said grouped CDRs as a function of data within said user-selected second sorting field;

delivering said customized carrier-specific report to said remote user terminal; and

presenting said customized carrier-specific report to said user at said remote user terminal according to user-selected format preferences, said customized carrier-specific report being selectively utile for monitoring network usage and making billing statements.

In Walter, a system and method for managing a telecommunications network through the near real time analysis of Call Detail Records (CDRs) is taught. (Walter, see abstract). "Unlike conventional systems," the CDRs as taught in Walter are specifically generated within call-processing switches before being forwarded to a Network Information Concentrator (NIC) for some initial processing. (Walter, see column 3, lines 46-67; column 4, lines 1-3; switches 18 in Figure 1). After some initial processing by the NIC, the CDRs are then provided to a server where the CDRs are further processed. (Walter, see column 4, lines 3-5; server 10 in Figure 1). In this way, information within the CDRs can ultimately be retrieved and viewed on the graphical displays of one or more client computers. (Walter, see column 3, lines 4-6; column 4, lines 6-8; column 5, lines 11-29; column 8, lines 66-67; column 9, lines 1-13; column 11, lines 3-28; client computers 12 in Figure 1). As specifically taught in Walter, during processing, the CDRs are first grouped according to the call-processing switches (i.e., network devices) in which they were generated and also the call times during which they were generated. (Walter, see column 2, lines 22-29, 44-47, 62-64; column 4, lines 14-18; column 7, lines 49-63; claims 1-5). In this way, information within the CDRs can be analyzed and utilized to detect low Answer/Seizure Ratios (ASRs) resulting from "network events" (i.e., call failures) originating in particular call-processing switches

and/or call routes within a telephone network. (Walter, see column 2, lines 15-23, 35-41, 52-57; column 5, lines 30-67; column 6, lines 1-59). Only after first being specifically grouped according to call-processing switches and call times are CDRs grouped according to call service carrier according to Walter. (Walter, see column 2, lines 30-34, 47-52, 65-67; column 3, lines 1-4; column 4, lines 24-67; column 5, lines 1-10; column 8, lines 1-55; claims 1-5). Specifically grouping the CDRs in such a manner as taught in Walter is not simply a matter of somewhat arbitrary “design choice” as suggested by the Examiner, for Walter specifically teaches such groupings “[i]n keeping with the invention.” (Walter, see column 4, lines 24-67; see especially the specific wording of claims 1-5 in Walter). In short, therefore, Walter does not teach a CDR-processing method comprising the method steps of “preliminarily processing ... CDRs according to which telecommunications service providers supported the call transactions indicated in [the] CDRs” and also “selecting a first sorting field ... and grouping ... CDRs as a function of data within [the] first sorting field, [wherein the] first sorting field [is] user selected as a carrier identification field,” as now claimed and required in Applicants’ independent claim 1 (emphasis added). Instead, Applicants maintain that Walter specifically teaches away from initially processing, grouping, or sorting CDRs on the basis of telecommunications service provider or call service carrier identification. Furthermore, Walter neither teaches nor suggests a CDR-processing method comprising the method step of “generating a customized carrier-specific report” for grouped CDRs that is “utile for ... making billing statements,” as also claimed and required in Applicants’ independent claim 1 (emphasis added). Instead, Applicants maintain that Walter merely teaches a method for analyzing CDRs to help pinpoint problematic call-processing switches and/or call routes within a telephone network that are frequent sources of undesirable “network events” (i.e., call failures). (Walter, see column 1, lines 13-67; column 2, lines 1-12; column 6, lines 47-59). Thus, the CDR-analyzing method taught by Walter is generally not utile for making billing statements.

In Driskell, a method for associating information regarding various provided services with particular “elements” (i.e., branches, divisions, departments, or subsidiaries) of a business organization receiving such services is taught. More

particularly, the method as taught in Driskell utilizes a computer to (i) gather various services information encoded in electronic form, (ii) organize the services information into a services-specific list, and (iii) correlate the services information with particular elements of the business organization, wherein the elements are classified into an overall organizational hierarchy. The various elements within the business organization's hierarchy, along with the various services information collected and associated therewith, can be displayed on a computer monitor screen and/or printed out for management analysis and reporting purposes. For example, in one methodology taught by Driskell, "electronic bills" are received from various service providers, and organization expense reports for billing and/or budget analysis by business management are generated therefrom. (Driskell, see abstract; column 1, lines 49-67; column 2, lines 1-53; column 3, lines 16-65; column 4, lines 10-24; column 5, lines 24-67; column 6, lines 1-67; column 7, lines 1-17; column 16, lines 8-17, 32-67; column 17, lines 1-23; column 32, lines 43-53). As with Walter, however, Driskell does not teach a CDR-processing method comprising the method steps of "preliminarily processing ... CDRs according to which telecommunications service providers supported the call transactions indicated in [the] CDRs" and also "selecting a first sorting field ... and grouping ... CDRs as a function of data within [the] first sorting field, [wherein the] first sorting field [is] user selected as a carrier identification field," as now claimed and required in Applicants' independent claim 1. Furthermore, though Driskell does generally teach the processing of electronic bills received from telephone service providers, Driskell neither teaches nor suggests any method that is specifically capable of processing CDRs. (Driskell, see column 26, lines 15-67; column 27, lines 1-67).

In Cauffman, a system and method for distributing telephone bills on PC-compatible diskettes to large-volume telecommunications customers (i.e., subscribers) is taught. Each diskette contains subscriber-specific telephone billing information (for example, CDR-type information). Upon loading the diskette in a personal computer (PC), a subscriber may then sort and analyze his/its telephone billing information and costs in various ways and thereafter display or print out a billing report according to user-formulated query requests entered into the computer. (Cauffman, see column 13,

lines 17-61; Figure 1). To create each such subscriber-specific diskette in the first place, telephone services billing information (i.e., records or data) from one or more telecommunications carriers is received via magnetic media and/or telephone communications channels and entered into a batch program. Upon receipt and entry of the billing information or data, the data is first sorted and "rearranged" according to "customer number" and "station number order." Thereafter, a number identifying the telecommunications carrier for which the bills are to be produced is read. (Cauffman, see column 14, lines 5-41; Figure 2). After some further processing, the data is ultimately formatted and stored on subscriber-specific diskettes for distribution to large-volume telecommunications services subscribers. In short, therefore, Cauffman does not teach a CDR-processing method comprising the method steps of "preliminarily processing ... CDRs according to which telecommunications service providers supported the call transactions indicated in [the] CDRs" and also "selecting a first sorting field ... and grouping ... CDRs as a function of data within [the] first sorting field, [wherein the] first sorting field [is] user selected as a carrier identification field," as now claimed and required in Applicants' independent claim 1 (emphasis added). Instead, Applicants maintain that Cauffman specifically teaches away from initially processing, grouping, or sorting CDRs on the basis of telecommunications service provider or call service carrier identification.

In sum, therefore, Walter, Driskell, and Cauffman, either alone individually or in combination with each other, fail to teach or suggest Applicants' invention as presently claimed in independent claim 1. In view of the disparate teachings of Walter, Driskell, and Cauffman discussed hereinabove, Applicants thus respectfully maintain that the combination of Walter, Driskell, and Cauffman does not render obvious Applicants' invention as presently claimed in independent claim 1. Furthermore, given that claims 2-4 and 6-11 are dependent on claim 1, Applicants further maintain that the subject matter claimed in dependent claims 2-4 and 6-11 is generally not rendered obvious either.

With regard to the obviousness rejection of independent claim 12, Applicants maintain that the combination of Walter, Driskell, and Cauffman does not render obvious Applicants' claimed invention. In particular, with regard to Applicants' independent claim 12 as amended, Applicants maintain that Walter, Driskell, and Cauffman, either alone individually or in combination with each other, neither teach nor suggest:

[a] call detail record (CDR) processing system for a telecommunications network, said system comprising:

a system cluster in operative communication with said telecommunications network for generating a plurality of CDRs each indicative of a call transaction on said telecommunications network;

a server-based splitter in operative communication with said system cluster for preliminarily processing said CDRs according to which telecommunications service providers supported the call transactions indicated in said CDRs;

a production database server in operative communication with said system cluster for storing said CDRs as periodically received from at least one of said system cluster and said splitter;

a user access server in operative communication with said production database server, said user access server programmed to (i) select a first sorting field from a plurality of fields within each CDR and group said plurality of CDRs as a function of data within said first sorting field, wherein said first sorting field is user selected as a carrier identification field, (ii) analyze a user-selected second sorting field within each of said CDRs within a group of CDRs sorted by said first sorting field, and (iii) generate a customized carrier-specific report for each of said grouped CDRs as a function of data within said user-selected second sorting field; and

a user access terminal in operative communication with said user access server for presenting said customized carrier-specific report to a user according to user-selected format preferences, said customized carrier-specific report being selectively utile for monitoring network usage and making billing statements.

As alluded to earlier hereinabove, Walter does not teach a CDR processing system comprising "a server-based splitter ... for preliminarily processing ... CDRs

according to which telecommunications service providers supported the call transactions indicated in [the] CDRs” and also a “user access server programmed to ... select a first sorting field ... within each CDR and group ... CDRs as a function of data within [the] first sorting field, wherein [the] first sorting field is user selected as a carrier identification field,” as now claimed and required in Applicants’ independent claim 12 (emphasis added). Instead, Walter specifically teaches a system wherein CDRs are first grouped according to the call-processing switches (i.e., network devices) in which they were generated and also the call times during which they were generated. (Walter, see column 2, lines 22-29, 44-47, 62-64; column 4, lines 14-18; column 7, lines 49-63; claims 1-5). In this way, according to Walter, information within the CDRs can be analyzed and utilized to detect low Answer/Seizure Ratios (ASRs) resulting from “network events” (i.e., call failures) originating in particular call-processing switches and/or call routes within a telephone network. (Walter, see column 2, lines 15-23, 35-41, 52-57; column 5, lines 30-67; column 6, lines 1-59). Only after first being specifically grouped according to call-processing switches and call times are CDRs grouped according to call service carrier according to Walter. (Walter, see column 2, lines 30-34, 47-52, 65-67; column 3, lines 1-4; column 4, lines 24-67; column 5, lines 1-10; column 8, lines 1-55; claims 1-5). In addition, Walter generally does not teach a CDR processing system comprising “a system cluster in operative communication with [a] telecommunications network for generating a plurality of CDRs each indicative of a call transaction on [the] telecommunications network,” as claimed in Applicants’ independent claim 12 (emphasis added). Instead, “[u]nlike conventional systems,” Walter teaches a system in which CDRs are exclusively generated within the call-processing switches of a telephone network. (Walter, see column 3, lines 46-66; Figure 1). Furthermore, Walter neither teaches nor suggests a CDR-processing system comprising a “user access server programmed to ... generate a customized carrier-specific report” for grouped CDRs that is “utile for ... making billing statements,” as claimed and required in Applicants’ independent claim 12 (emphasis added). Instead, Applicants maintain that Walter merely teaches a system for analyzing CDRs to help pinpoint problematic call-processing switches and/or call routes within a telephone network that are frequent sources of undesirable “network events” (i.e., call failures).

(Walter, see column 1, lines 13-67; column 2, lines 1-12; column 6, lines 47-59). Thus, the CDR-analyzing system taught by Walter is generally not utile for making billing statements.

Driskell, in turn, does not specifically teach a CDR-processing system comprising “a system cluster ...; a server-based splitter ...; a production database server ...; a user access server ...; and a user access terminal ...,” as now claimed and required in Applicants’ independent claim 12. Instead, as alluded to earlier hereinabove, Driskell merely teaches a system for associating information regarding various provided services with particular “elements” (i.e., branches, divisions, departments, or subsidiaries) of a business organization receiving such services. In fact, Driskell neither teaches nor suggests any system that is even capable of specifically processing CDRs.

Cauffman, last of all, also does not specifically teach a CDR-processing system comprising “a system cluster ...; a server-based splitter ...; a production database server ...; a user access server ...; and a user access terminal ...,” as now claimed and required in Applicants’ independent claim 12. Instead, as alluded to earlier hereinabove, Cauffman merely teaches a system for distributing telephone bills on PC-compatible diskettes to large-volume telecommunications customers (i.e., subscribers). (Cauffman, see column 13, lines 17-61; Figure 1).

In sum, therefore, Walter, Driskell, and Cauffman, either alone individually or in combination with each other, fail to teach or suggest Applicants’ invention as presently claimed in independent claim 12. In view of the disparate teachings of Walter, Driskell, and Cauffman discussed hereinabove, Applicants thus respectfully maintain that the combination of Walter, Driskell, and Cauffman does not render obvious Applicants’ invention as presently claimed in independent claim 12. Furthermore, given that claims 13-20 are dependent on claim 12, Applicants further maintain that the subject matter of dependent claims 13-20 is generally not rendered obvious either.

CONCLUSION


In view of the foregoing remarks, Applicants respectfully submit that independent claims 1 and 12 as amended, as well as claims 2-4, 6-11, and 13-20 dependent thereon, are both novel and non-obvious with respect to the disclosures and teachings of Walter, Driskell, and Cauffman. Therefore, Applicants respectfully request that the Examiner's rejections under 35 U.S.C. § 103(a) be withdrawn and that a Notice of Allowance be issued for claims 1-4 and 6-20.

Entry and reconsideration of the claims as herein amended is respectfully requested under 37 C.F.R. § 1.116(c) in view of the Examiner's detailed comments regarding the Cauffman reference, which was newly cited in the Office Action dated July 21, 2005 and marked as being "final." At the very least, in submitting this proposed Amendment within two months of the mailing date of the Office Action, Applicants respectfully request an Advisory Action from the Examiner and also entry of the claims as amended herein.

Should the Examiner have any questions with respect to any matter now of record, the Examiner is invited to contact Applicants' undersigned attorney at (248) 223-9500.

Respectfully submitted,

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